



PART

DESCRIPTIVE

Letter Press

to the

INDIAN MICROCOSM

by

J. GANTZ & SON

MADRAS.

N^o I.

THE PUCKALLY.



Puckallies or Water Carriers are generally Musselmen: they are common throughout Eastern countries whether in camps or in cities—In an Indian army they are indispensable; and to each corps or regiment in the Company's service an established number is regularly attached. Upon field service when water is not easily to be obtained Hindoos of Caste do not scruple to receive water from them—Their monthly pay is Ten Rupees and three quarters.

The water bags are also called Puckallies: they are made of the hide of a full grown Ox, and are suspended on each side of the bullock so as to be equipoised when filled—Water is drawn from the Well by a simple bag or bucket of leather, and the Puckallies are filled thro' an aperture near the top—A flap covers this aperture to prevent the spilling of the water, and the admission of dust, and at the bottom corner of the bag the skin of one of the legs is left on the hide, to form a spout by which the water may be drawn off.—A string of leather easily and effectually secures this spout, by being tied round it when required.

A pair of Bags contains about 21 Gallons of water, 6 Gallons of which are sold for 10 Cash or for somewhat less than a farthing—The Water Carriers however obtain a tolerably good livelihood by their calling.

The two women represented in the Plate are Tunney-Kerchies of the Soodra' Cast.

N^o. 2.

TRAVELLERS WITH CARTS AND BULLDOGS.



The Plate represents Travellers halting on a journey.

The native Cart or bullock bandy is one of the most simple carriages in the world.—A Pair of wheels running on an axletree, and a pole for the draught, and 2 side pieces for a platform, secured to the axletree by ropes or nails, form this easily constructed Cart.—And yet this cart constitutes the chief mode of conveyance at Madras for the Merchandize of persons in trade, the materials of the Builder, or the Baggage, and stores of an Army.

The Cartmen or Bullock drivers have generally no other clothing than a piece of cloth wrapped round their loins; they are usually of the Soodra caste and are worshippers of the Idol Siva.—They choose for their halting places, when travelling, a cluster of Banian or other trees, if possible near a tank, a river or well of good water. They are supposed in the annexed representation to be preparing for their next days journey:—their food is of the commonest kind, being seldom better than a mess of rice, with a chillie, or with pickle, and sometimes with the addition of a piece of broiled salt fish.

At the Police Office at Madras, a Register is kept of the rates of charge for a bullock bandy hire to proceed to any station inland: the established rate is for a cart, driver, and two bullocks, One Rupee and One Panam for every ten Miles.

The pay of a bullock driver is Seven Rupees per Month, and the Monthly expense of keeping a bullock cart is about Fifteen Rupees.

N^o. 3.

THE PICKOTTAH.



The Machine exhibited in this Plate is called a Yaitam or Pickottah commonly used for the purpose of irrigation. They are employed in Paddy or Rice fields; in Gentlemen's gardens, and in Betel and other plantations, where small artificial canals are made to conduct the water raised by them to the particular spots at which it is required.

The subject in this number represents a tank and two Pickottas, on the banks of the Tank are piers projected with two wing walls to serve as a reservoir, a plank fixed across the wings as may be seen in the background Pickottah, or two pieces of strong planks fixed to the lower end of the pier as in the foreground one, serve for one of the men, the bailer, to stand upon.

The yaitam or Pickottah post, is usually made of the Nával or Jásáb tree Vágá or red wood fixed slanting on the pier and standing about 10 feet in height above the surface of the masonry, to this post two strong pieces of boards are nailed and bound with ropes to serve as a socket or support for a Palmira transverse beam with an iron pin passing through it near the centre to serve as a swivel for the beam to vibrate upon. A bamboo of about 25 or 30 feet long is fastened to the upper end of this beam and at the lower extremity of the bamboo an eye is cut to admit a small wooden rod, or bolt which supports the vessel for drawing the water, this vessel is called a chaal, and contains about 9 Gallons.

The method of raising water by this machine is simply by the man on the top walking alternately from one to the other side of the centre of the transverse beam: this of course produces alternate vibration, and the consequent elevation and depression of the vessel called the Chaal. The man at the bottom by means of the bamboo guides this vessel at the moment of its dipping, and when it is raised he tilts out the water into a channel formed in the masonry, whence it is conducted by small rivulets over the whole garden, ground, or plantation.

This machine is exceeding simple in its construction, and efficacious in its action. About 50 Gallons of water per minute are raised by it by two men to the height of 10 or 12 feet and this quantity they will raise for 3 or 4 hours together without intermission. They usually work as many hours as these, morning and evening.

The Pickottah is generally used also for emptying ditches or draining canals or Rivers, whenever Bridges are erected, or other work is done which requires a head or spring of water to be kept under. Sometimes it is made strong and large enough for two men to work at the top who steady themselves by taking hold of bamboos which are fixed up for that purpose.

N^o 4.

MASOOLA BOATS.



The accompanying sketch is taken from the Beach at Madras, and exhibits the shipping in the Roads in the offskip

The surge at Madras is noted for its violence, and the height to which it rises in windy weather there are usually three surfs to be passed before a Boat can get into smooth water And these frequently rise to the height of six feet and upwards — When the surf is high it usually breaks with a curl that is, the highest part of the wave falls over first, and leaves a kind of hollow wall of water underneath — These surfs are dangerous, and unless avoided would overwhelm a boat — The Boatmen are however extremely dextrous and clever in passing through this danger and the Masoola boat is perhaps the only kind of vessel well adapted for the purpose — An explanation of the construction of these Boats is reserved for a future number

A Masoola boat when hard pressed with business would make 3 or 4 trips daily to the merchant vessels but only 2 to ships of War, which generally lie a great way off at sea — These boats make way at the rate of about 2 miles per hour and their hire is as follows

For each trip to a Man of War	30 fanams
Do to Merchant Vessels	15 do
Do to The Dhonies (or Native Vessels)	10 do

The Masoola boats are generally manned by ten hands that is, eight men at the oars, one at the helm and a boy to bail out the water

N^o. 5.

THE HACKERRY.

The drawing represented in this number is a Hackerry, a conveyance much in use among Hindoos of distinction.

A Hackerry is drawn by oxen of the largest kind called northward Bullocks, and is light in its construction. The skeleton of this conveyance is made of light strong wood, tho' commonly of bamboos and rattans by the poorer class of Hindoos—In either case it is covered over with cloth or chintz, light brass ornaments and a few bells fastened around as may be seen in the Plate to adorn it externally. The Talapoin, or minaret, is of brass and is sometimes plated. The carriage part of the Hackerry is constructed on the same principles as that of a common Indian Cart. A seat of about three feet square is laid on the plat form and covered by a dome made of rattans and bamboos resting on four posts over the seat with three canvass or cloth blinds to shelter those that may be seated within.

The Wheels are strong of about 2 feet in Diameter with four double spokes each, and the driver sits over the pole of the truck astride as on horseback.

Though this conveyance is not intended for more than one person, they often manage to accommodate two or more.

The Hackerry is considered by the Malabar people to be preferable to any other kind of conveyance, and to be more imposing in appearance especially for the celebration of a Wedding or other pompous feast, on such occasions there may be seen thro' the Streets of Black Town a procession of them following each other in order, the bullocks having their horns painted of different colours and being decorated with flowers, rich trappings and other ornaments. The Pongul feast or Hindoo harvest which happens about the middle of January, is famous for such processions.

The Hindoos of affluence especially Modeliars, are particularly elated in possessing a handsome pair of Hackerry Bullocks they are commonly to be purchased for about 100 Madras Rupees and are brought from 2 to 500 Miles North of Madras. Their keeping costs about 17½ Rupees per Month as they are fed well and kept in high condition.

A first rate Hackerry when complete is valued at from 150 to 200 Madras Rupees, but a common one made of cheaper materials may be had for about a hundred Rupees.

SHAUNARRS OR TODDYMEN.

The Plate represents 3 Toddy-men: two in the foreground and one in the offskip mounting a Cocoanut tree.

The figures are represented with the apparatus necessary for their trade. The rope passing round their bodies is used in climbing the trees: The small ladder is for mounting a few feet from the ground: the small basket pending from the branch of the Cocoanut tree on the shoulder of the right hand figure is used for collecting the Toddy; and the Cases fastened on the right sides of the figures contain hooked knives, a small wooden bludgeon for beating the spadices of the trees, and other tools necessary for them in following their occupation.

The method of climbing the tree is this. A loop of rope is placed over the feet to keep them from separating further than the extent allowed by the rope, which in climbing the tree is prevented hurting the feet by a short gaiter or guard of thick leather: the large rope is then passed round the tree as well as the body; it is then secured and forms a sort of band containing both the trunk of the tree and the body of the Toddyman.—He then raises this larger rope to a level with the arm pits, and places his feet against the trunk of the tree. By pressing his hands with force against the tree, he raises his feet about 18 inches, and bears the full weight of his body against the large band. He next takes hold of the band by one hand, keeping the other against the tree as shewn in the offskip figure, and raising the rope by a sudden jerk places himself in a position for again lifting his feet; and so the operation of climbing is repeated till he reaches the top. When he arrives at the desired height the rope is shifted from the shoulders to the waist; the man then supports himself with ease and has both his hands at liberty.

Toddy or Culloo is extracted from Cocoanut, Palmyra and Date trees: the manner is as follows, when the spadix is about blowing the point

is cut off and bound round tight with a leaf of the tree. It is then beaten with a stick, or the small bludgeon before mentioned, twice a day for a fortnight, a thin slice being cut off at each time of beating —The spadix thus treated begins to emit a Juice which is toddy and which is collected in a small earthen ware pot, tied to the spadix for that purpose as shewn in the tree above the figure in the offskip.

The Toddy of the Cocoanut tree when fresh drawn and of good quality is of a pleasant sweet flavour, but when kept till it becomes acid, it is intoxicating. It is in this case mixed with the fruit and a few leaves of the Thorn apple, and it is sold for about a fanam or three half pence a quart, at the licenced Arrack shops and is eagerly drank by the natives — Toddy produces a kind of coarse sugar called Jagherry.—Arrack is also distilled from Toddy and it makes besides vinegar of tolerable good quality when kept till it becomes sour.

A Cocoanut tree yields about a pint of Toddy per day from each spadix, and some trees afford toddy from 2 to 5 spadices : a Palmyra tree yields about 2 quarts per day : a Date tree upwards of a Gallon—The two latter trees afford their juices only from January to May, but *Cocoanut* tree yield Toddy all the year round : though it is usual to extract Toddy from them one half the year and obtain fruit the other half

The toddymen are industrious people of the sect of Siva:—they eat animal food of all kinds except beef. and drink distilled liquors.

THE CATEMARANS.



The accompanying sketch is a representation of Catamarans at the Madras Beach exhibits also a few Donies, or Native Vessels in the Offskip.

The Catamarans are composed of three spars or logs of light wood lashed together, forming a raft of about 12 to 15 feet long by 3 to 5 feet broad manned by two or more Kurriers or Boatmen according to the size of the Catamaran.

In passing through the surf they are often capsized and the men washed away from their seats; but the dexterity of the Kurriers in swimming and diving, enables them to regain the Catamaran generally with great ease.

Their use is valuable in rough weather, for conveying despatches &c. to the shipping in the roads, when no Masoola boats could venture out for that purpose nor to render assistance. The Catamaran men secure letters &c. in their conical caps made of Cadjan slips without being damaged and several have distinguished themselves in tempestuous weather in affording aid to boats which have happened to upset and for which they have received Medals. They often attend Masoola boats either in embarking or disembarking passengers.

Catamarans are generally made use of for fishing by the Kurriers and run out several miles from the shore; on these occasions a few go together carrying large fishing nets and baskets. They start generally by the break of day, after taking their breakfast which is seldom better than some boiled rice and fish and return from sea by 4 o'clock P. M. They use Paddles in crossing the surf but when they get into smooth water they spread a sail made of a coarse mat or gunny tied to a pole fastened in the centre of the catamaran.

The malabar name of these rude vessels is Kuttoo-murram, which literally means "Wood tied together."

THE RICE BEATERS.

The plate exhibits the interior of a Hindoo house with Women beating and winnowing rice

The Hindoo houses are generally built on one and the same plan, having an open yard in the middle and on 3 sides of the yard verandahs supported by redwood Posts, with capitals somewhat resembling the ancient Ionic order. The rooms have generally small windows, but they very seldom are placed to look into the street. At the entrance of the house is a kind of lobby or passage with a door opening into the street and another door opening into the yard — They have frequently also a back yard adjoining the Out Offices, but their street door is always at the Southernmost end of the building, with carved ornaments on the door frame just over the door way.

The process of beating rice is as follows, some paddy i. e. rice in the husk, being put into a large mortar either of granite or Tamarind wood, is beaten by two women with long and weighty pestles or pounders, made of red wood having ferrules of Iron fastened at both ends. The grain is by this means separated from its husk, and afterwards given to other women to be winnowed, it is then again beaten and cleared from its bran or tower and is then ready for use

The rice made by the above mentioned process is called "Putchac Arashee" but the "Pulunga Arashee" is made by having the Paddy first boiled and well dried in the sun before it is beaten. rice beaten the latter method is thought to be easier of digestion and more wholesome.

A Mercall (about 3 Gallons) of Paddy when properly beat up and winnowed produces about 4 measures of clean rice, $\frac{1}{2}$ measure of Noce or broken rice $1\frac{1}{2}$ of Paddy husk and 2 of bran.

The husk produced is sold to Black Smiths for fuel, and for mixing with Cow dung to be made into flat circular cakes called Vraatty which are dried by being exposed to the sun or being stuck up against walls. This latter Article is much used by the Hindoos for fuel and produces great heat. The bran is sold or used for feeding poultry and black Cattle

The quantity of Paddy a woman can beat and clean per day is about 5 Mercalls.

THE CHECKOO OR OIL MILL.

The Oil Mill of the Malabars is simply the hollowed trunk of an old Tamarin Tree of about 3 feet in diameter: with a base 5 or 6 feet long firmly buried in the earth.—The upright piece of timber seen projecting from the cavity of the Mill is the means employed to express the oil, which it does, by crushing the material between itself and the inside of the Mill while it revolves on its own axis —An inspection of the plate will shew the simple arrangement of levers and Animal power, by which a rotatory motion is produced, only premising that the top of the aforesaid upright piece of timber is square, and fits into a corresponding square mortice made in the upper end of the sloping lever which is attached to it.

As the juices of the Cocoanut, or of the oil seeds thrown into the Mill are expressed, they are taken up by soaking Cloths in them, and then collected, by wringing out the oil into receiving vessels.—The refuse of the Cocoanut is sold as food for Pigs and horned Cattle.

These Mills extract oil from the Cocoanut: the Ellipay Nut; and Jingerly seeds.—They work about 8 or 10 hours a day:—and when unused are covered with a roofing of Cadjaus—or Palmira tree leaves—as shown in the offskip.

N^o. 10.

PALANKEEN BEARERS.

The interior of the Palankeen is furnished with a mattras—Cushions, &c. covered with—Chintz—Morocco Leather—or Silk. The exterior of the Palankeen is best described by the sketch.

The best Palankeen bearers are of the Gentoo Cast, and come from about 300 miles Northward of Madras, they are almost invariably remarkable for their cleanliness—hardiness—and honesty : and are seldom known to be guilty of forgetting that important distinction between *meum* and *tuum*, when property is left in the Palankeen, or intrusted to their charge.

A set of bearers consists of 9, viz 8 carriers and the head bearer, called the Peddoo Bhoy.—Their pay is about 7 Rupees each per month, and the head Bhoy a rupee more —Sometimes the set of bearers consists of 12 or upwards, according to the opulence of their Employer, the corpulence and weight of the party employing them, or the distance they may have to travel.

They live usually with great sociality among themselves ; and eat together as a family ; one of the set commonly being the caterer. — When resting after work they employ their time if fatigued to the best advantage, viz. by sleeping —at other times they amuse themselves with Cards, playing at a game somewhat similar to whist, but when more industriously inclined, which is not seldom, they employ their spare time in spinning Cotton thread by hand, and in knitting fishing nets.

Few sights are more interesting, or more characteristic of oriental scenery than Palankeen Bhoys resting after a day's journey, and partaking of their evening repast—Seated perchance under the deep wide spreading foliage of the Indian fig, the thousand arm'd banyan tree, they group themselves in a cluster, and with infinitely greater relish and enjoyment than Epicurism ever granted to her disciples, partake of the Patriarchal fare of a mess of boiled rice and conjee water, rendered palatable by appetite, and made savoury by the addition of a morsel of salt fish—a green chilly—or a little atchar—The fire that answered the purposes of their *cuisine* burning close at hand, throws a flickering light over the sable countenances of the orientals—and gleaming on the waters of the neighbouring tank—offers a subject richly worthy the pencil of a Salvator Roza, and one that may perhaps be touched by less skillful hands in the course of this Publication.

N^o II.

THE CAWRY MAN.

Cawry Currens or Water Carriets,—generally of the Gentoo Caste, or Sooders—are employed in Towns and Gardens about Madras Their Monthly Pay is from 3 to 7 Rupees They are however in the habit of selling water at 20 cash per pot, containing about 3 Gallons each

The Drawing consists of a Cawry curien resting on the road side—another approaching him bearing the Cawry, a Gentoo Braminy Woman with Brass Water Pots on her head, and—A Tanny Pandal, or watering shed erected under a banyan tree for the convenience of Travelers—Water Pandals, are commonly erected on cross roads under large spreading trees by Bramins or men of caste for the purpose of charity, or on account of vows—The figures represented at the Pandal are a Bramin in the act of giving a Soodra woman water or butter Milk, and the woman to whom it is given is obliged to keep at a respectable distance that even her shadow may not fall upon the Bramin and pollute him—It will be seen that he pours the liquid, out of the vessel into her hands, by which she conveys it to her mouth—In the offship is a group of figures at a Well

A Cawry is a strong piece of split bamboo, about $4\frac{1}{2}$ feet long and 3 inches broad at the centre, it is tapering at the ends where knobs are formed to suspend the rattan loop nests These loops contain earthen water pots each holding about 3 or 4 Gallons the mouths of the pots are covered with flat wooden covers to defend the water from dust and prevent it from being spilled

N^o. 12.

BUILDING AND REPAIRING MASOOLA BOATS.

The Masoola Boat does not at all resemble the European Boat in its construction, but is built in a peculiar manner calculated to withstand the violent surge of the Coromandel Coast; its shape is the same as that shewn in the plate; and it consists of strong Planks of a species of Jungle wood called Acha Marram sewed together by the fibres of the outer covering of the Cocoanut.—For this purpose the edges of the Planks are pierced with holes, and as the joints are not very nicely wrought, a seam of straw is seen running along each joint on the inside of the boat, having been sewed in at the time the joints were connected.—The twine made of the material before mentioned is strong and elastic; and while the straw keeps the joints nearly water tight, the twine yields, on any sudden concussion the Boat may receive, and by this flexibility enables the Masoola Boat to ride through impetuous surges, which would stave in pieces a Boat constructed in the ordinary European manner.

The Masoola Boat is about 25 feet long—9 broad—and 5 high:—the bottom is a little flat, and the sides almost perpendicular.—Its burden is about 2 tons—the cost of building one is about 150 Rupees, and it is manned by 8 rowers and a steersman

The Boat people are their own boat builders, and repairers.—they make and repair their Boats in the Monsoon time, when there is no Shipping in the Roads, and when consequently there is nothing for them

to do in the way of their ordinary occupation.—The fire in the sketch shews the method they employ to impart to the Planks the curve necessary to form the Bows of the Vessel—While the fire contracts the fibres of the wood inside, oil is thrown on the opposite side to prevent the outer fibres from breaking and to render them more flexible.

The Boat People generally, are Christians of the Roman Catholic persuasion and have a Church built for their sole use at Royapooram, a village on the North of the Black Town.—Their morality is not however of the highest order, for they are notorious pilferers of the packages, &c. they convey from the shipping to the shore—and they have the common credit of being remarkably dextrous in effecting their purpose.

N^o 13.

THE BASKET MAKERS.

This Plate exhibits a Basket maker and one of his wives at work, while the other having slung her child on one side in her cloth, with a bundle of reeds in her hand is ready to start to the neighbouring town or villages for employment — In the back ground are their huts which are not more than the height of an ordinary sized man as may be seen by the figure standing near one of them, and are about six feet square, — these huts have a partition in the centre when the man has two wives, allowing thereby each of them a compartment — When they travel their huts are taken to pieces and carried on their heads, being constructed of bamboos and covered with *erdjan* leaves and straw

The materials used for basket making is the centre part of the branch of the date tree or *Itchum murrum* and a sort of coarse rattan

The Basket makers are called *Koravens* and are classed among the inferior suders — The *Koravens* in general abstain from eating beef, but eat wild beasts, cats, rats, bandycoots, snakes, jackhalls, monkeys, kites, crows, &c — They are altogether a wandering tribe, and march in large parties, with black cattle and asses, and as they carry their huts with them, they encamp wherever water and pasture can be found for their cattle — A *Koraven* may marry as many wives as he can afford to

keep, and a woman may leave her husband whenever she chooses to do
so

The Koravens are divided into five clans or classes and rank as follows Viz

1st *Naat Koraven* — Those that go about from village to village to bore the ears of children and tattoo people, — they also make and sell brooms

2d *Kooday Pinnay Koraven*. — Literally means Basketmakers, whose employment is to make Wicker baskets, Bamboo mats, Tatties for sheds, Sieves, Moorams or Winnows &c for domestic purposes —

3d. *Chittan, Pamboo atty, or Kukla Koraven*. — Their employment is to catch monkeys, snakes, birds &c and go about dancing them in the streets, but the principal members of this class deal in salt and thereby derive the name of *Hoopoo Koraven*.

4th *Kullay Koraven* — This class are noted both by their designation as well as profession to be thieves, similar to the *kullaries* of the several Naads in the Southern Carnatic — Their women are not less artful and active, for they go about as gypsies predicting future events, tattoo the hands and bodies of people for a trifle, and fix artificial moles on the face of women &c

5th. *Mullay Koraven* — Or the hill tribe wander about the Mountains, feeding upon roots, herbs, game and wild beasts.

N^o. 14.

THE MUSICIANS.

This plate represents native Musicians in a Malabar street, such as those that are commonly employed to head or lead a procession on occasions of festivity.

The first figure at the left corner of the sketch is playing a Too-tarri, an instrument resembling a Clarionet. the second is a Cymbal player and is called a Tallum. the third beats a pair of Kettle drums called Daummaar, both the drummer and the drums are carried on a small sized bullock—they are beaten with a small straight and a crooked stick as may be seen by the attitude of the figure in the Plate and the fourth performs on a Mudthallam or drum which is beat with the palm of the drummer's hand

Musicians are all Suders of the lowest cast and are barbers by profession. Their wives profess midwifery and understand medicine.

N^o. 15.

THE CORN-GRINDERS.

The method of grinding wheat and other sorts of grain by the natives of the Coast of Coromandel is with a hand mill called by them a Yenderum—the Plate represents one worked by two men. -

The Yenderum is made of two circular granite stones of about 2½ feet in Diameter and about 6 inches thick ; to the lower one, a stout wooden pivot is fixed in the centre, and the top one is placed over it, having a hole in the centre also, to receive the pivot, at the top of the hole it is shaped like a funnel to hold about two handful of corn : Grinding is effected by the top stone being turned by two men as shewn in the sketch , the corn that is poured into the hole at the centre, gradually finds its way between the stones and is thereby ground down with facility .—And about 4 measures or 375 cubic inches of wheat would be ground down by one of these mills in a hour. .

The two Women in the plate are winnowing and sifting the flour thro' a sieve—and the other in the back ground is clearing away the dust and other light particles from the wheat by pouring it out of a mooram or winnow against the wind.

The subject of this plate was taken from nature at Madras.

N^o. 16.

THE BUTCHERS.

The accompanying sketch exhibits Country Butchers at their shambles. The method of killing and flaying sheep and cutting up are all shewn in the plate.

The Butchers about Madras are of the Muselman persuasion, and kill nothing but sheep.—They repeat an Ejaculation to *Alla* before they put the animal to death.

THE BLACK-SMITHS.

This plate exhibits a Black-smith's shed and forge, the figures are made to represent a Smith and hammerman malleating an Iron bar, a bellows boy working at a pair of bellows, and another workman filing at a bench vice

A native's forge is erected with a few bricks and clay and built in a triangular shape, high enough to defend the bellows boy from the fire This lad sits behind the brick work with two pairs of bellows or wind bags made of sheep skin The neck end of the skin is secured to an iron pipe to serve as a nozzle to the bellows and the other end has two pieces of straight wood attached to it. These are held in the hand by the help of a strap, and when the skin is lifted, the pieces of wood are held apart, but when the skin is pressed down they are closed in order to confine the air and expel it:—and by means of two pairs of such simple bellows, used alternately with both hands, the native Smiths can obtain a welding heat. Charcoal and paddy-husk are the fuel employed for the purpose.

The anvil in this plate is such as is usually seen with Black-smiths in the vicinity of Madras—but up country Smiths use a piece of granite or other hard stone for an anvil, or a piece of an old cannon when they can obtain it

Smiths are Sudras of the Kammalam caste—but the Hammermen and bellows' boy are of any other caste and are hired daily, the former at 3 fanams, and the latter at 1½ fanam per day

Two Hammermen are employed together when the work is heavy

Sudras of the Kammalam caste, are of the left hand fraternity, and keep distinctly to handicraft trades for their subsistence, such as Smithery, Carpentry, Stone-masonry, &c. no other caste is allowed to interfere with them or to become artificers.

N^o. 18.

THE CARPENTERS.

This plate represents Carpenters at work.

The figure on the left side of the plate is represented in the act of chipping a spar with an adze, which is the only instrument the Indian artificers use in a standing posture—at other times they work squatting or sitting as may be seen with reference to the other figures, which represent the acts of chisseling, planing, and drilling holes.

The instruments they use for these purposes differ materially from European tools, being simpler and less expensive, but at the same time less efficient. It is notwithstanding surprising to see the different kinds of work they will perform with simply a small plane and chisel. The latter indeed is used almost in all cases instead of a saw. They make great use of their feet and great toes, their toes often performing the duty of a vice. The figure represented to be drilling employs the toes of his left foot to prevent the wood from shaking or moving about.

Sudras of the Kammalam caste, are of the left hand fraternity, and keep distinctly to handicraft trades for their subsistence, such as Smithery, Carpentry, Stone-masonry, &c no other caste is allowed to interfere with them or to become artificers.

N^o. 18.

THE CARPENTERS.

This plate represents Carpenters at work.

The figure on the left side of the plate is represented in the act of chipping a spar with an adze, which is the only instrument the Indian artificers use in a standing posture—at other times they work squatting or sitting as may be seen with reference to the other figures, which represent the acts of chisseling, planing, and drilling holes.

The instruments they use for these purposes differ materially from European tools, being simpler and less expensive, but at the same time less efficient. It is notwithstanding surprising to see the different kinds of work they will perform with simply a small plane and chisel. The latter indeed is used almost in all cases instead of a saw. They make great use of their feet and great toes, their toes often performing the duty of a vice. The figure represented to be drilling employs the toes of his left foot to prevent the wood from shaking or moving about.

THE AIR MAN.

The accompanying are sketches of a Cuddapah Brahmin named Sheshal, taken at the government house at Madras — Besides several exhibitions in *L'agerdemain*, the most uncommon and surprising exploit which he performs is sitting in the air. — When he is about doing this his attendants screen him round with a blanket, till he is mounted, and on a signal given, the screen is removed when he is seen sitting in the air in the posture represented in sketch No. 1 which is a front, and sketch No. 2 a side view.

He rests no other part of his body but the wrist of his right arm only, on a deer skin rolled up and fixed horizontally before him, to a perpendicular brass bar that is fastened towards one end of a small four legged stool — While he sits he continues in prayer, with beads in his hand, with his eyes half closed. — After the exhibition which continues but a few minutes he is again screened till he is dismounted, and has taken the whole of his apparatus to pieces, when he produces only the stool, the brass bar, and the deer skin for the inspection of the spectators.

He is in person a slender middle sized aged man — wears a long chintz gown; a yellow dyed turband, and a light waist band, with a row of large Panduram beads round his neck.

This professed juggler is invited to Gentlemen's gardens at Madras, where exhibiting himself he is very largely rewarded.

Published by J. Gantz and Son — Madras 1823.

WATER-WOMEN

The exhibition in this plate is a group consisting of Brahmin, Gentoos and Sudra women of Caste; at a village well, drawing and conveying water for domestic purposes, being one of the principal employments allotted to them. The vessels used for this purpose by them are commonly brazen pots containing about 5 Gallons of water,—but the poorer classes make use of Earthen pots.

Water being an element considered by Brahmins undefileable, they scruple not to bathe, wash their cloths and drink out of the same well in common with Sudras of Caste.